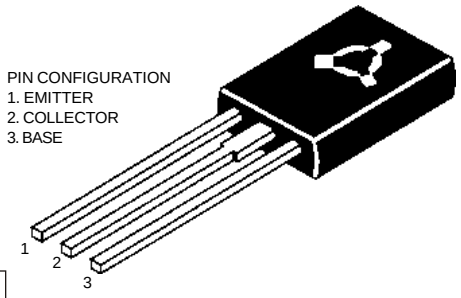
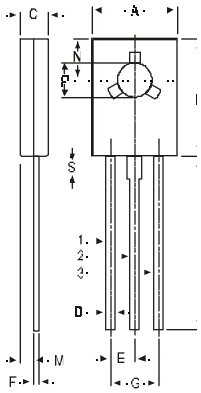
TO-126 (SOT-32) Plastic Package **CSC2371**

CSC2371 NPN PLASTIC POWER TRANSISTOR

Colour TV Chroma Output and Video Output





DIM	MIN.	MAX.
A	7.4	7.8
B	10.5	10.8
C	2.4	2.7
D	0.7	0.9
E	2.25 TYP.	
F	0.49	0.75
G	4.5 TYP.	
L	15.7 TYP.	
M	1.27 TYP.	
N	3.75 TYP.	
P	3.0	3.2
S	2.5 TYP.	

ALL DIMENSIONS IN MM

ABSOLUTE MAXIMUM RATINGS

Collector-base voltage (open emitter)	V_{CBO}	*max.*	*300 V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	*300 V*
Collector current	I_C	*max.*	*100 mA*
Total power dissipation up to T_C = 25°C	P_{tot}	*max.*	*10 W*
Junction temperature	T_j	*max.*	*150 °C*
Collector-emitter saturation voltage			
I_C = 30 mA; I_B = 3 mA	V_{CEsat}	*max.*	*1.5 V*
D.C. current gain			
I_C = 10mA; V_{CE} = 10V	h_{FE}	*min.*	*40*
		max.	*250*

RATINGS *(at T_A=25°C unless otherwise specified)*

Limiting values			
Collector-base voltage (open emitter)	V_{CBO}	*max.*	*300 V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	*300 V*

Emitter-base voltage (open collector)	V_{EBO}	*max.*	*7.0 V*
Collector current	I_C	*max.*	*100 mA*
Total power dissipation up to T_A = 25°C	P_{tot}	*max.*	*1.25 W*
Total power dissipation up to T_C = 25°C	P_{tot}	*max.*	*10 W*
Junction temperature	T_j	*max.*	*150 °C*
Storage temperature	T_{stg}		*–65 to +150 °C*

CHARACTERISTICS

T_{amb} = 25°C unless otherwise specified

Collector cutoff current			
I_E = 0; V_{CB} = 200 V	I_{CBO}	*max.*	*100 nA*
Emitter cut-off current			
I_C = 0; V_{EB} = 5 V	I_{EBO}	*max.*	*100 nA*
Breakdown voltages			
I_C = 1 mA; I_B = 0	V_{CEO}	*min.*	*300 V*
I_C = 0.1 mA; I_E = 0	V_{CBO}	*min.*	*300 V*
I_E = 0.1 mA; I_C = 0	V_{EBO}	*min.*	*7 V*
Saturation voltage			
I_C = 30 mA; I_B = 3 mA	V_{CEsat}	*max.*	*1.5 V*
D.C. current gain			
*I_C = 10 mA; V_{CE} = 10 V***	h_{FE}	*min.*	*40*
		max.	*250*
Output capacitance at f = 1MHz			
I_E = 0, V_{CB} = 20V	C_o	*max*	*3.0 pF*
Transition frequency			
I_C = 10 mA; V_{CE} = 30 V	f_T	*min.*	*50 MHz*

***** h_{FE} classification: N: 40-80 M: 60-120 L: 100-200 K: 160-250***

Customer Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/ CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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Continental Device India Limited
C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119
email@cdil.com www.cdilsemi.com